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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

1

of

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Complete if Known

Application Number	10/694,284
Filing Date	10/27/2003
First Named Inventor	Xu et al.
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	PA94-36-03

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
[Signature]	A1	4,267,212		Sakawaki	05-12-1981	
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	A3	4,451,507		Beltz et al.	05-29-1984	
	A4	4,731,155		Napoli et al.	03-15-1988	
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	A6	5,425,848		Haisma et al.	06-20-1995	
	A7	5,480,047		Tanigawa et al.	01-02-1996	
	A8	5,772,905		Chou	06-30-1998	
	A9	5,776,748		Singhvi et al.	07-07-1998	
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[Signature]	A15	6,334,960		Willson et al.	01-01-2002	
	A16	6,337,262		Pradeep et al.	01-08-2002	
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Examiner Signature	[Signature]				Date Considered	6/18/05

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¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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Sheet

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Application Number	10/694,284
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First Named Inventor	Xu et al.
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Group Art Unit	Unassigned
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Examiner Name	Unassigned
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Attorney Docket Number PA94-36-03

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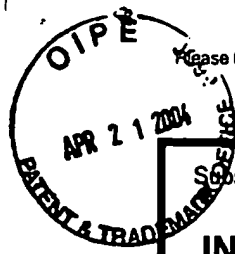
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Substitute for form 1449B/PTO		Complete if Known			
		Application Number	10/694,284		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	10/27/2003		
		First Named Inventor	Xu et al.		
		Group Art Unit	Unassigned		
		Examiner Name	Unassigned		
Sheet	3	of	5	Attorney Docket Number	PA94-36-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
SK	A22	Krauss et al., "Fabrication of Nanodevices Using Sub-25nm Imprint Lithography," Appl. Phys. Lett 67(21), 3114-3116, 1995	
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	A24	CHOU et al., "Imprint Lithography with 25-Nanometer Resolution," Science, Apr. 5, 1996, pp. 85-87, vol. 272.	
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Examiner Signature		Date Considered	6/8/05
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Attorney Docket Number	PA94-36-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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<i>LA</i>	A33	CHOU, "Nanoimprint Lithography and Lithographically Induced Self-Assembly," MRS Bulletin, July 2001, pp. 512-517.	
	A34	MIRKIN et al., "Emerging Methods for Micro-and Nanofabrication," MRS Bulletin, July 2001, pp. 506-509	
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	A36	BENDER M. et al., "Fabrication of Nanostructures using a UV-based Imprint Technique," Microelectronic Engineering, pp 223-236; 2000.	
	A37	SREENIVASAN et al., "High-Resolution Overlay Alignment Methods and Systems for Imprint Lithography," U.S. Patent Application Publication 2002/0098426. Published on July 25, 2002.	
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<i>LA</i>	A43	SREENIVASAN et al., "Step and Repeat Imprint Lithography Systems," U.S. Patent Application Publication 2004/0008334. Published on January 15, 2004.	

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Signature

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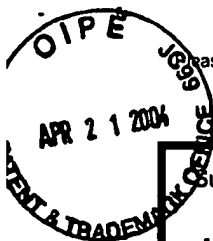
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		Filing Date	10/27/2003		
		First Named Inventor	Xu et al.		
		Group Art Unit	Unassigned		
		Examiner Name	Unassigned		
Sheet	5	of	5	Attorney Docket Number	PA94-36-03

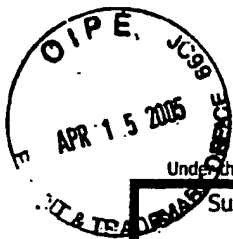
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	A44	WATTS et al., "Method For Fabricating Bulbous-Shaped Vias," U.S. Patent Application Publication 2004/0038552. Published on February 26, 2004.	
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	A47	SREENIVASAN, "A Method Of Forming Stepped Structures Employing Imprint Lithography," U.S. Patent Application 10/423,642. Filed with USPTO on April 25, 2003.	
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Examiner Signature		Date Considered	6/8/05
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				APPLICATION NUMBER	10/694,284
				FILING DATE	10/27/2003
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	2823
				Examiner Name	Toledo, Fernando
Attorney Docket Number	PA94-36-03				
Sheet	1	of	8		

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			

21	B1	6,391,217	B2	Schaffer et al.	5/21/2002	
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21	B18	6,776,094	B1	Whitesides et al.	8/17/2004	

Examiner Signature		Date Considered	4/8/05
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				FIRST NAMED INVENTOR	Xu et al.
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				Examiner Name	Toledo, Fernando
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241	B19	6,518,189	B1	Chou	2/11/2003	
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	B27	6,809,356	B2	Chou	10/26/2004	
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<i>4-1</i>	B37	2004/0170770	A1	Nguyen et al.	9/2/2004	
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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				APPLICATION NUMBER	10/694,284
				FILING DATE	10/27/2003
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	2823
				Examiner Name	Toledo, Fernando
				Attorney Docket Number	PA94-36-03
Sheet	4	of	8		

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			

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Examiner Signature		Date Considered	6/5/02
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				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	2823
				Examiner Name	Toledo, Fernando
Sheet	5	of	8	Attorney Docket Number	PA94-36-03

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Office	Number ³				

<i>AM</i>	B64	WO	00/21689		Chou et al.	4/20/2000		
	B65	JP	02-92603		Kurikawa et al.	4/3/1990		
	B66	JP	02-24848		Kamio	1/26/1990		
	B67	WO	01/47003		Steiner et al.	6/28/2001		
	B68	WO	02/07199		Chou	1/24/2002		
	B69	WO	2004/114016		Chou et al.	12/29/2004		
	B70	WO	99/05724		Chou et al.	2/4/1999		
	B71	WO	03/010289		Chou et al.	2/6/2003		
	B72	WO	03/079416		Chou	9/25/2003		
<i>EW</i>	B73	WO	03/099536		Chou et al.	12/4/2003		

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				FILING DATE	10/27/2003
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	2823
				Examiner Name	Toledo, Fernando
Sheet 6 of 8				Attorney Docket Number	PA94-36-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
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	B74	Choi et al., Design of Orientation Stages for Step and Flash Imprint Lithography, Precision Engineering, pp. 192 - 199, 1/1/2001	
	B75	Colburn et al., Step and Flash Imprint Lithography for sub-100 nm Patterning, Proceedings of SPIE Vol. 3997, pp. 453 - 457, 1/1/2000	
	B76	Johnson et al., Advances in Step and Flash Imprint Lithography, SPIE Microlithography Conference, 2/23/2003	
	B77	Heidari, Nanoimprint Lithography at the 6 in. Wafer Scale, J. Vac. Sci. Technol. B 18(6), pp. 3557 - 3560, 11/1/2000	
	B78	Translation of Japanese Patent 02-92603	
	B79	Translation of Japanese Patent 02-24848	
	B80	Hirai et al., Mold Surface Treatment for Imprint Lithography, Journal of Photopolymer Science and Technology, Vol. 14, No. 3, pp 457-462, 8/1/2001	
↓	B81	Roos et al., Nanoimprint Lithography with a Commercial 4 Inch Bond System for Hot embossing, Proceedings of SPIE Vol. 4343, pp. 427-435, 10/1/2001	
	B82	Chou et al., Ultrafast and Direct Imprint of Nanostructures in Silicon, Nature, Col. 417, (June 2002), pp. 835-837, 6/1/2002	

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				FILING DATE	10/27/2003
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	2823
				Examiner Name	Toledo, Fernando
Sheet 7 of 8				Attorney Docket Number	PA94-36-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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<i>Alt</i>	B83	Chou et al., Nanoimprint Lithography, Journal of Vacuum Science Technolgy B 14(16), pp. 4129-4133, 11/1/1996	
	B84	Colburn et al., Development and Advantages of Step-and-Flash Lithography, Solid State Technology, 7/1/2001	
	B85	Colburn et al., Characterization and Modeling of Volumetric and Mechanical Properties for Step and Flash Imprint Lithography Photopolymers, Journal of Vacuum Science Technology. Vol b. 19(6), 11/1/2001	
	B86	Yu et al., Properties of Fluorinated Amorphous Diamond Like Carbon Films by PECVD, Applied Surface Science 219 (3-4); pp. 228-237, 12/1/2003	
	B87	Compon et al., Electroanalysis at Diamond-Like and Doped-Diamond Electrodes, Electroanalysis 15(17); pp. 1349-1363, 9/1/2003	
	B88	Mansano et al., Protective Carbon Layer for Chemical Corrosion of Stainless Steel, Diamond and Related Materials 12 (3-7); pp. 749-752, 3/1/2003	
	B89	Butter et al., Production and Wetting Properties of Fluorinated Diamond-Like Carbon Coatings, Thin Solid Films, 311(1-2); pp. 107-113, 12/31/1997	
	B90	Hakovirta et al., Heat Resistance of Fluorinated Diamond-Like Carbon Films, Diamond and Related Materials 10(8); pp. 1486-1490, 8/1/2001	
<i>Alt</i>	B91	Zhu et al., The Improvement of the Oxidation Resistance of TiAl Alloys by Fluorine Plasma-Based Ion Implantation, Surface and Coatings Technology 158; pp. 502-507, 9/1/2002	

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				FILING DATE	10/27/2003
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	2823
				Examiner Name	Toledo, Fernando
Sheet 8 of 8				Attorney Docket Number	PA94-36-03

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<i>Art</i>	B92	Yao et al., Structural, Mechanical and Hydrophobic Properties of Fluorine-Doped Diamond-Like Carbon Films Synthesized by Plasma Immersion Ion Implantation and Deposition (PIII-D), Applied Surface Science 230; pp. 172-178, 4/17/2004	
	B93	Bailey et al., Step and Flash Imprint Lithography: Defect Analysis, Journal of Vacuum Science, B 19(6), pp. 2806-2810, 11/1/2001	
	B94	Bailey et al., Step and Flash Imprint Lithography: Template Surface Treatment and Defect Analysis, Journal of Vacuum Science, B 18(6), pp. 3572-3577, 11/1/2000	
	B95	Schneider et al., Stripes of Partially Fluorinated Alkyl Chains: Dipolar Langmuir Monolayers	
	B96	Golden et al., Designing Porous Low-k Dielectrics, www.reed-electronics.com/semiconductor/index.asp?layout=articlePrint&articleID=CA82824, 4/6/2005	
	B97	Padovani et al., Chemically Bonded Porogens in Methylsilsesquioxane: I. Structure and Bonding, Journal of the Electrochemical Society, 149 (12) F161-F170, 10/16/2002	
<i>Art</i>	B98	Wolf et al., Silicion Processing for the VLSI Era, Volume 1--Process Technology, pp. 407-413, 1/1/1986	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/894,284
				Filing Date	10/27/2003
				First Named Inventor	Xu et al.
				Group Art Unit	2823
				Examiner Name	Fernando Toledo
Attorney Docket Number	PA94-38-03				
Sheet	1	of	1		

U.S. PATENT DOCUMENTS						
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		Number	Kind Code ² (if known)			

AT	C1	6,488,642	B1	Bray et al.	10/22/2002	
	C2	5,542,978		Kindt-Larsen et al.	8/6/1996	
	C3	5,837,314		Beaton et al.	11/17/1998	
	C4	6,585,778	B1	Li et al.	5/20/2003	
	C5	6,503,814	B1	Benish et al.	1/7/2003	
	C6	6,849,272	B2	Moore et al.	11/18/2003	
	C7	6,204,343	B1	Barucha et al.	3/20/2001	
	C8	4,614,667		Larson et al.	8/30/1988	
	C9	3,810,874		Mitsch et al.	5/14/1974	
	C10	6,737,489	B2	Linert et al.	5/18/2004	
	C11	6,721,529	B2	Chen et al.	4/13/2004	
	C12	6,664,306	B2	Gaddam et al.	12/16/2003	
	C13	6,790,905	B2	Fitzgerald et al.	8/14/2004	
	C14	6,544,594	B2	Linford et al.	4/8/2003	
	C15	6,774,183	B1	Palumbo et al.	8/10/2004	
	C16	6,830,819	B2	Kaplan et al.	12/14/2004	
	C17	6,802,870	B2	Chang et al.	10/12/2004	
AT	C18	6,389,696		Dempsey et al.	2/14/1995	

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